Contents of volume 52, 2003

Part 1

Geoadditive models *E. E. Kammann and M. P. Wand* 1

Solving for an optimal airline yield management policy via statistical learning *V. C. P. Chen, D. Günther and E. L. Johnson* 19

Bayesian texture segmentation of weed and crop images using reversible jump Markov chain Monte Carlo methods *I. L. Dryden, M. R. Scarr and C. C. Taylor* 31

A generalized estimating equation approach to modelling foetal response in developmental toxicity studies when the number of implants is dose dependent *A. Y. C. Kuk* 51

Correlation-adjusted estimation of sensitivity and specificity of two diagnostic tests *M. P. Georgiadis, W. O. Johnson, I. A. Gardner and R. Singh* 63

Bayesian analysis of competing risks with partially masked cause of failure *S. Basu, A. Sen and M. Banerjee* 77

The efficient integration of abundance and demographic data *P. Besbeas, J.-D. Lebreton and B. J. T. Morgan* 95

An experimental design criterion for minimizing meta-model prediction errors applied to die casting process design *T. T. Allen, L. Yu and J. Schmitz* 103

Lee–Carter mortality forecasting: a parallel generalized linear modelling approach for England and Wales mortality projections *A. Renshaw and S. Haberman* 119

Part 2

Early stopping by using stochastic curtailment in a three-arm sequential trial *D. H.-Y. Leung, Y.-G. Wang and D. Amar* 139

Choice of parametric models in survival analysis: applications to monotherapy for epilepsy and cerebral palsy *G. P. S. Kwong and J. L. Hutton* 153

A hierarchical model for space–time surveillance data on meningococcal disease incidence *L. Knorr-Held and S. Richardson* 169

Assessment of Athens's metro passenger behaviour via a multiranked probit model *M. Linardakis and P. Dellaportas* 185

Markov random-field models for estimating local labour markets *M. R. Sebastiani* 201

Analysing state dependences in emotional experiences by dynamic count data models *U. Böckenholt* 213

Regression models for cyclic data *G. J. G. Upton, K. A. Hickey and A. Stallard* 227

Reconstructing the incidence of human immunodeficiency virus (HIV) in Hong Kong by using data from HIV positive tests and diagnoses of acquired immune deficiency syndrome *P. H. Chau, P. S. F. Yip and J. S. Cui* 237

Modelling accelerated life test data by using a Bayesian approach *D. Sinha, K. Patra and D. K. Dey* 249

Part 3

Horwitz's rule, transforming both sides and the design of experiments for mechanistic models *A. C. Atkinson* 261

Forecasting composite indicators with anticipated information: an application to the industrial production index *F. Battaglia and L. Fenga* 279

A Bayesian compartmental model for the evaluation of 1,3-butadiene metabolism *M. Mezzetti, J. G. Ibrahim, F. Y. Bois, L. M. Ryan, L. Ngo and T. J. Smith* 291

A bounded influence regression estimator based on the statistics of the hat matrix *A. D. Chave and D. J. Thomson* 307

Bivariate kurtotic distributions of garment fibre data
C. J. Hoggart, S. G. Walker and A. F. M. Smith 323
An extreme value analysis for the investigation into the sinking of the M. V. Derbyshire
J. E. Heffernan and J. A. Tawn 337
Evolution of recurrent asthma event rate over time in frailty models
L. Duchateau, P. Janssen, I. Kezic and C. Fortpied 355
Randomization tests for small samples: an application for genetic expression data
G. L. Gadbury, G. P. Page, M. Heo, J. D. Mountz and D. B. Allison 365
A hierarchical modelling approach to combining environmental data at different scales
D. Hirst, G. Storvik and A. R. Syversveen 377

Part 4

Calculating power for the comparison of dependent κ-coefficients
H.-M. Lin, J. M. Williamson and S. R. Lipsitz 391
Anticipating catastrophes through extreme value modelling *S. Coles and L. Pericchi* 405
A class of models for aggregated traffic volume time series
A. E. Brockwell, N. H. Chan and P. K. Lee 417
A novel bootstrap procedure for assessing the relationship between class size and achievement
J. R. Carpenter, H. Goldstein and J. Rasbash 431
Tracing studies and analysis of the effect of loss to follow-up on mortality estimation from patient registry data *V. T. Farewell, J. F. Lawless, D. D. Gladman and M. B. Urowitz* 445
Variance estimation for a low income proportion *Y. G. Berger and C. J. Skinner* 457
Modelling forces of infection by using monotone local polynomials
Z. Shkedy, M. Aerts, G. Molenberghs, P. Beutels and P. Van Damme 469
A latent Gaussian Markov random-field model for spatiotemporal rainfall disaggregation
D. J. Allcroft and C. A. Glasbey 487
Modelling heterogeneous space–time occurrences of earthquakes and its residual analysis
Y. Ogata, K. Katsura and M. Tanemura 499
Index of authors 511